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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,423	01/24/2002	Simon Alexander Hanson Rose	AG/3-21900/A/AC 509/DIV 2	1070
324 7590 07/31/2007 CIBA SPECIALTY CHEMICALS CORPORATION PATENT DEPARTMENT 540 WHITE PLAINS RD P O BOX 2005 TARRYTOWN, NY 10591-9005			EXAMINER QAZI, SABIHA NAIM	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 07/31/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/057,423	<b>Applicant(s)</b> ROSE ET AL.	
	<b>Examiner</b> Sabiha Qazi	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 6-8, 10, 11 and 17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6-8, 10, 11, and 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Non-Final Office Action**

Claims 1, 6-8, 10, 11, and 17 are pending, all of which are rejected. No claim is allowed.

**Summary of this Office Action dated October 15, Sunday, 2006**

1. Information Disclosure Statement
2. Copending Applications
3. Specification
4. 35 USC § 112 (1)--Written Description Rejection
5. Double Patenting Rejections
6. 35 USC § 103 Rejections
7. Response to Remarks
8. Communication

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**Name Change**

- Applicants acknowledge that inventors are same. A correction of names is requested.
- The Examiner noted a name difference in copending applications.

Applicant's response regarding the name change is incomplete. What is the reason to write the name in different ways? Applicant may select any name so that it will not be confusing for any one who may be looking for a double patenting or for any other issue.

- **Inventors in 10/057423:** Simon Rose and Jayne Turner
- **Inventors in 09/361816:** Simon Alexander Hanson Rose and Jayne Anne Turner

The name of the patent application for 09/361816, see this is HANSON ROSE et al., while the name for 10/057423 is ROSE et al.

***35 USC § 112 --- First Paragraph Written Description Rejection***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which

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it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 1, 6-8, 10, 11 and 17 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Presently claimed invention is drawn to:

An aqueous soil treatment composition containing essentially water and, in solution, comprising adding an aqueous soil treatment composition consisting essentially of:

*(a) An ionic water-soluble fertilizer in an amount of at least 10 weight percent, and*

*(b) A water-soluble anionic polymer which has the intrinsic viscosity of from 9-12 dl/g and is formed from water-soluble monomer blend comprising 60-80% anionic monomer and from 40 to 20% nonionic monomer, the composition having a viscosity of not more than 4,000 cps, wherein the aqueous soil treatment composition is suitable for being processed in dosing equipment which is in place for processing solutions of fertilizer alone and the aqueous soil treatment composition stabilizes and fertilizes the soil.*

Applicant had no possession of the claimed subject matter at the time the application was filed. The data presented in the specification on pages 10-12 does not

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describe the invention a claimed. The method steps as claimed are missing. Further claims are broad and contain an step of "an ionic water-soluble fertilizer in an amount of at least 10 weight percent", containing at least 10% of any ionic water soluble fertilizer. Further claim is drawn to (b) *a water-soluble anionic polymer which has the intrinsic viscosity of from 9-12 dl/g and is formed from water-soluble monomer blend comprising 60-80% anionic monomer and from 40 to 20% nonionic monomer, the composition having a viscosity of not more than 4,000 cps.* Compounds containing intrinsic viscosity of from 9-12 dl/g and is formed from water-soluble monomer blend includes thousands of compounds having different chemical structures, different molecular weight and different chemical properties. Furthermore, ionic water-soluble fertilizer in an amount of at least 10 weight percent", containing at least 10% of any ionic water soluble fertilizer includes large number of compounds having different molecular weight, different structures and different chemical properties. It is impossible to determine the properties, for a wide range of different class of compound. Applicants had no possession of the subject matter as has been claimed.

The written description requirement prevents applications from using the amendment process to update the disclosure in their disclosures (claims or specification) during the pendency before the patent office. Otherwise applicants could add new matter to their disclosures and date them back to their original filing date, thus defeating an accurate accounting of the priority of the invention. See 35 USC 132. The function of description requirement is to ensure that the inventor had possession, as of filing date of the application relied on, the specific subject matter claimed by him.

See *Genetech*, 108 F 3d 1361, 1365 (Fed. Cir. at 1366, 78, 1999).

The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to one skilled in the art that the inventor had the possession at the time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claimed language. See *In re Kaslow*, 707 F 2d 1366, 1375 (Fed. Cir. 1983).

In the present case Applicant has no possession of method of the subject matter at the time the application was filed.

See MPEP 2163.06.

### **Double Patenting Rejection**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

#### **Double Patenting--1st Rejection**

Claims 1, 6-8, 10, 11 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-13 of U.S. Patent No. 6,288,010. Although the conflicting claims are not identical, they are not patentably distinct from each other. See the entire document especially the portions cited below. See also lines 27-49 in column 8 where specific reference has been made for aqueous fertilizer compositions

Instant claims differ from the reference in claiming a specific range of viscosity from 9dl/g to 12dl/g wherein the reference teaches at least 6dl/g which is formed from water-soluble monomer or monomer blend. See lines 41-61 where 9dl/g is among the preferred.

It would have been obvious to one skilled in the art to prepare additional beneficial compositions and methods because reference teaches the same components and overlapping ranges. The composition used for process is considered obvious. See the abstract; lines 5-67 in column 1; lines 1-67 in column 2; lines 20-32 in column 4;



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lines 25-57 in column 3; lines 48-61 in column 6; lines 41-54 in column 7; lines 27-49 in column 8; and examples.

### **Double Patenting 2<sup>nd</sup> Rejection**

Claims 1, 6-8, 10, 11 and 17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of U.S. Patent No. 6,397,519. Although the conflicting claims are not identical, they are not patentably distinct from each other because in present application component (a) is an ionic, water-soluble fertilizer wherein in US ' 519 component is a calcium compound. It is well known that calcium compounds can be used as soil stabilizers, which also show effective water infiltration, see lines 36-46 in column 1. Soluble calcium compounds, which can be used, include calcium chloride, calcium nitrate, a blend of calcium nitrate with ammonium nitrate and chelate forms of calcium. Calcium ammonium nitrate is one of the preferred calcium compounds. See lines 7-12 in column 3.

Ammonium nitrate is a known fertilizer.

It would have been obvious to one skilled in the art to prepare additional beneficial compositions and methods because reference teaches the same.

It had been held by the courts that even in a case where the reference does not teach the same use of the composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

**Claim Rejections - 35 USC § 103—1<sup>st</sup> Rejection**

*The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:*

*(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.*

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary.

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Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 6-8, 10, 11 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over AHLNAS et al<sup>1</sup>. See the entire document especially col. 3 lines 1-57; examples and claims.

AHLNAS et al teaches a controllably active A controllably active fertilizing preparation in the form of an emulsion-suspension or an emulsion is comprised of: a) 30-90% by weight of mixtures containing plant nutrients, b) 5-50% by weight of water, c) 2-20% by weight of an oleophilic organic substance, d) 1-25% by weight of a surface-active substance, and e) 0.1-10% by weight of an acid or its mixture, salt or anhydride. The acid component improves the extraction of phosphor, which embraces the presently claimed invention.

Instant claims differ from the prior art in having a generic scope.

One skilled in the art would be motivated to prepare the aqueous solution-form fertilizer as has been presently claimed because the prior art teaches the ranges in concentration and the amount of diluted fertilizer needed for soil aggregation. The motivation to dilute the composition is taught by the reference. Even if prior does not teach the same use, the two compositions are considered obvious. It had been held by the courts that even in a case where the reference does not teach the same use of the

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<sup>1</sup> United States Patent No. 5,482,529. See the entire document.

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composition, the **two different intended uses are not distinguishable in terms of the composition**, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

In absence of any criticality and/or unexpected results of specific combination or ratio the compositions as claimed is considered obvious over the prior art of record.

### **Claim Rejections - 35 USC § 103—2<sup>nd</sup> Rejection**

#### **Claim Rejections - 35 USC § 102**

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 6-8, 10, 11 and 17 rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over HASHIMOTO et al. (US Patent 3,798,838).

5. The reference discloses fertilization and irrigation of soil wherein the soils are contacted with the aqueous solution of a water soluble plant nutrient salt and an effective amount of a partially hydrolyzed polyacrylamide to reduce the permeability of the soil without rendering it impermeable to water flow.

6. The reference further discloses that water-soluble plant nutrients and partially hydrolyzed polyacrylamide exhibit a synergistic effect to decrease the water

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permeability of the soils. Furthermore it discloses that plants grow better in the treated soil and are more efficient in uptake of nutrients from the soil. It also discloses that "These discoveries can be used to conserve water and fertilizer and improve the efficiency of agronomy by connecting the soil with a solution having a concentration of from 0.001 to about 1 weight percent of a polyacrylamide having from 5 to about 80 percent of its amide groups hydrolyzed to carboxylic acid groups and from 0.001 to 5 weight percent of a water, plant nutrient salt". See the abstract of the invention.

Nutrients are fertilizer salts.

7. HASHIMOTO discloses a water-soluble polymer (polyacrylamide) and a nutrient in example 1. The reference also discloses that 12 to 45 percent of the amide groups are hydrolyzed to water soluble carboxylate groups in lines 1-6, column 3 which is the instant polymer. The amount of a polymer in water and a viscosity of 2 to 1,000 cPs are taught in lines 10-14 in column 4. Dissolution of a polymer in water is taught in lines 26-34, column 4. The viscosity of the polymer of HASHIMOTO such solution inherently possess the instantly recited intrinsic viscosity. A reference must be considered for all that is disclosed and must not be limited to its preferred embodiments or working examples.

### **Claim Rejections - 35 USC § 103—3<sup>rd</sup> Rejection**

Claims 1, 6-8, 10, 11 and 17 rejected under 35 U.S.C. 103(a) as being unpatentable over MILLER (EP 0586,911) in view of WALLACE et al (US Patent 4,797,145) and HASHIMOTO et al (US Patent 3,798,838).

**1. Determining the scope and contents of the prior art.**

The reference MILLER, EP '911 teaches a composition for the treatment of soil containing an anionic fertilizer and anionic polymer such as polyacrylamide and 97 to 0 mole percent of different water-soluble monomer or salts thereof. See the entire document especially lines 36-50 and lines 1-30 on page 3; lines 4-40, page 4; Tables, examples and claims. The composition is added to water prior to irrigating an area of soil. See claims 8 and 10.

WALLACE et al., US'145 teach an aqueous composition comprising a water-soluble polymer and fertilizer salts in examples. Various synthetic polymers and salts thereof are taught in lines 23-61, column 3. The instant claims are drawn to any water-soluble fertilizer, WALLACE teaches calcium chloride. EP reference teaches soil modifiers.

**2. Ascertaining the differences between the prior art and the claims at issue.**

Instant claims differ from the reference in claiming the ranges of viscosities of the composition.

**3. Resolving the level of ordinary skill in the pertinent art.**

MILLER in EP '911 teaches gel composition and instant is aqueous composition. (The viscosity would be the same for anionic polymer taught by EP '911). The reference teaches copolymers of acrylamide and acrylic acid, in ranges from 3 to 100 mole percent of acrylic monomer unit or salts and from 97 to 0 mole percent of other water-soluble monomer or salts. (see lines 38-45 on page 3). Useful polymers taught include polyacrylamide, copolymers of acrylamide and acrylic acid, polyacrylates. Examples 1-4 and 7 contain specific polymers of acrylamide and acrylic acid.

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It is known that a chemical compound and its properties for example viscosity, melting point, density etc. are inseparable to the compound). See *In re Spada*, 15 USPQ (2d) 1655, 1658.

WALLACE teaches various polymers wherein copolymers of acrylic acid and acrylamide are included. Concentration of polymers (lines 50-52, 0.1% by weight, column 4) and calcium chloride (line 61, column 6) are taught. Wallace teaches copolymers of acrylic acid or salts thereof. Wallace also teaches the use of calcium chloride, which is fertilizer, see line 61 in col. 6.

HASHIMOTO et al. US Patent 3,798,838) teaches a method of irrigation and fertilization. The reference teaches that partially hydrolyzed polyacrylamide exhibit a synergistic effect to decrease water permeability of the soils. Furthermore, the reference teaches that plants grow better in the treated soil and are more efficient in uptake of nutrients from the soil. These discoveries can be use to conserve water and fertilizer and improve the efficiency of agronomy by contacting the soil with a solution having a concentration of from 0.001 to about 1 weight percent of a polyacrylamide having from 5 to about 80 percent of its amide groups hydrolyzed to carboxylic acid groups and from 0.001 to 5 weight percent of a water soluble, plant nutrient salt (fertilizer salts).

**4. Considering objective evidence present in the application indicating obviousness or nonobviousness.**

One having ordinary skilled in the art would be motivated at the time of invention to prepare beneficial composition by combining the teachings of the prior art for the improvement of soil. HASHIMOTO teaches an aqueous composition comprising a water soluble polymer such as polyacrylamide and nutrient (example 1). It also teaches that 12 to 45 percent of the amide groups are hydrolyzed to water-soluble carboxylate

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groups (see lines 1-6, col. 3). The amount of polymer in water and the viscosity of 2 to 1,000 cps (see lines 10-16, col. 4) and dissolution of a polymer in water is taught (lines 26-34, col. 4). The polymer of HASHIMOTO solution viscosity inherently possesses the instantly claimed intrinsic viscosity. See *In re Mills*, 477 F2d 649, 176 USPQ 196 (CCPA). (The reference must be considered for all it discloses and must not be limited to its preferred embodiments or working examples).

There has been ample motivation provided by the prior art to prepare the composition as instantly claimed because it would have been obvious to select potential anionic polymers which includes acrylamide polymer and combine with the nutrients to achieve the composition use for the treatment of soil. As taught by EP '911. The ratio and ranges would have been obvious to one skilled in the art because HOSHIMOTO and WELLACE teach the viscosities and ratios.

In absence of any criticality and/or unexpected results instant invention is considered *prima facie* obvious to one skilled in the art.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

#### **Claim Rejections - 35 USC § 103—4<sup>th</sup> Rejection**

- Claims 1, 6-8, 10, 11 and 17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over JP 51-124578. The reference teaches an aqueous solution-form soil conditioning fertilizer comprising an acrylamide-potassium acrylate copolymer, which embraces the applicant's claimed invention. The reference also



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teaches that it is preferred to use the copolymer in an amount of about 0.001 to 0.05% by weight, based on the weight of the soil, but if desired, the copolymer may be used in a larger or smaller amount. See the entire document, especially Section 2 of Page 1, all examples, and claims.

Instant claims differ from the prior art in having a generic scope.

One skilled in the art would be motivated to prepare the aqueous solution-form fertilizer as has been presently claimed because the prior art teaches the ranges in concentration and the amount of diluted fertilizer needed for soil aggregation. The Applicants' arguments that lowering the viscosity as unexpected results is not persuasive, in view of the teachings of the prior art of record, as one skilled in the art would have been motivated to lower the viscosity, as lower viscosity fluids flow easier.

In absence of any criticality and/or unexpected results of specific combination or ratio the compositions as claimed is considered obvious over the prior art of record.

### **Response to Arguments**

- Arguments were fully considered but are not found persuasive therefore rejections are maintained for the same reasons as set forth in our previous office action.
- Claims 1, 6-8, 10, 11, and 17 stand rejected under 35 USC 103(a) as being unpatentable over AHLNAS et al (US 5,482,529).

The Applicants argue that:

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1) AHLNAS et al teaches pastes or emulsion-suspensions while the instant invention is in solution, therefore the instant invention is unobvious. The Examiner respectfully disagrees. No criticality was seen.

Also: It has been decided by the courts that even in a case where the reference does not teach the same use of the composition, the two different intended uses are not distinguishable in terms of the composition, see *In re Thuau*, 57 USPQ 324; *Ex parte Douros*, 163 USPQ 667; and *In re Craige*, 89 USPQ 393.

2) AHLNAS et al does not mention the viscosity of the anionic polymer, percent anionic monomer making up the final polymer, percent of the nonionic monomer making up the anionic polymer, and the resulting viscosity of the final aqueous soil treatment, therefore the instant invention is unobvious. What makes these specific ranges beneficial? What makes these ranges better or unexpected from AHLNAS et al? No criticality was seen.

- Claims 1, 6-8, 10, 11, and 17 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of US Patent No. 6,394,519 ("US '519"). The Applicants argue that the claims of the instant application are not obvious over US '519 because the claimed ranges are different and are therefore not obvious. The Examiner respectfully disagrees. Even if the ranges are different, Applicants have not shown any unexpected and/or unobvious results. What makes the ranges better and/or unexpected? No criticality was seen.

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- The Applicants' arguments that lowering the viscosity as unexpected results is not persuasive, as one skilled in the art would have been motivated to lower the viscosity, as lower viscosity fluids flow easier. The Examiner directs the Applicants to the MSN Encarta article on Viscosity, which defines it as: "Viscosity, property of a fluid that tends to prevent it from flowing when subjected to an applied force. High-viscosity fluids resist flow; low-viscosity fluids flow easily." The tenacity with which a moving layer of fluid drags adjacent layers of fluid along with it determines its viscosity, which is measured in a viscometer, a container with a standard-sized orifice in the bottom. The rate at which the fluid flows through the orifice is a measure of its viscosity." This article shows that viscosity is well known to one skilled in the art.


### **Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi, Ph.D. whose telephone number is 571-272-0622. The examiner can normally be reached on any business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter, Ph.D. can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
SABIHA QAZI, PH.D  
PRIMARY EXAMINER